

EIGHT NEW TAXA OF ASPHODELINE FROM TURKEY

E. TUZLACI*

ABSTRACT. Four new species of *Asphodeline* (Liliaceae), *A. baytopae* E. Tuzlaci, *A. anatolica* E. Tuzlaci, *A. ciliicica* E. Tuzlaci, *A. peshmeniana* E. Tuzlaci, and four new infraspecific taxa, *A. tenuior* (Fisch.) Ledeb. subsp. *tenuiflora* (C. Koch) E. Tuzlaci var. *puberulenta* E. Tuzlaci, *A. damascena* (Boiss.) Baker subsp. *gigantea* E. Tuzlaci, *A. damascena* (Boiss.) Baker subsp. *ovoidea* E. Tuzlaci, and *A. damascena* (Boiss.) Baker subsp. *rugosa* E. Tuzlaci are described from Turkey. In addition the new combination *A. brevicaulis* (Bertol.) J. Gay ex Baker subsp. *brevicaulis* var. *edumea* (Zohary) E. Tuzlaci is made and a chromosome number of $2n = 28$ is recorded for *A. baytopae*.

Asphodeline brevicaulis (Bertol.) J. Gay ex Baker in J. Linn. Soc. 15: 276 (1876).

1a. Plant very tall, up to 140cm; stem leafy to base of inflorescence
..... subsp. **druzorum**
1b. Plant shorter, (10–) 20–40 (–70)cm tall; stem leafy usually only in the
lower half..... subsp. **brevicaulis**

Subsp. brevicaulis

1a. Fruiting pedicels ± recurved var. **edumea**
1b. Fruiting pedicels erect to spreading var. **brevicaulis**

Var. brevicaulis

Syn.: *Asphodelus brevicaulis* Bertol. in Novi Comment. Acad. Sci., Inst. Bonon. 5: 430 (Misc. 1.20) (1842).

Asphodeline cretica Boiss. in Pinard, Pl. Car. Exsicc., n.v.

A. rhytidosperma Freyn in Bull. Herb. Boiss. 4: 197 (1896).

Distribution: Egypt (?), Iran (?), Iraq, Palestine, Syria, Turkey.

Var. edumea (Zohary) E. Tuzlaci, **comb. nov.**

Syn.: *A. recurva* Post in Bull. Herb. Boiss. 3: 166 (1895) var. *edumea*
Zohary in Pal. J. Bot., Jer. ser. 2: 184 (1941).

A. edumea (Zohary) Mouterde, Nouvelle Fl. Lib. Syrie 1: 214 (1966).

Distribution: Iraq, Palestine, Syria.

There are records under the name *A. recurva* Post of plants which were collected near Antakya (Turkey) by G. Post and also from between Irbid and Buşrah (Syria-Jordan). Later, the specimens collected in Palestine were published as a variety of *A. recurva* by Zohary (loc. cit.). In Zohary's paper, the flower was described as yellow from living material, though in Post's original description of *A. recurva* it was said to be white. Mouterde treated *A. recurva* as a 'nomen-confusum', after studying numerous gatherings from this area. According to Mouterde, the specimens from near Antakya were different from those collected in Palestine which he gave specific status as *A. edumea* (Zohary) Mouterde. I have seen a photograph of the specimen collected between Irbid and Buşrah. It has a simple raceme, distinctly globose fruit (not obovate-turbinate as in the original description),

* Eczacılık Fakültesi, Farmasötik Botanik Kürsüsü, Üniversite İstanbul, Turkey.

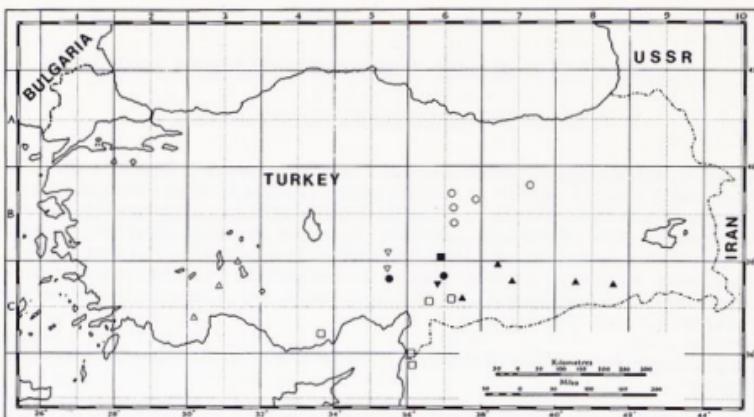


FIG. 1. Distribution of new taxa of *Asphodeline*: □ *A. baytopae*; ○ *A. tenuior* subsp. *tenuiflora* var. *puberulenta*; △ *A. damascena* subsp. *rugosa*; ▲ *A. damascena* subsp. *gigantea*; ▲ *A. damascena* subsp. *ovoidea*; ■ *A. peshmeniana*; △ *A. anatolica*; ● *A. cilicica*.

recurved pedicels and a short stem which is leafy near the base. All these specimens are accepted here as constituting a variety of *A. brevicaulis* subsp. *brevicaulis*.

Subsp. *druzorum* Zohary in Pal. J. Bot., Jer. ser. 2: 184 (1941).
Distribution: Lebanon, Palestine, Syria.

***Asphodeline baytopae* E. Tuzlaci, sp. nov. (Fig. 2).**

Species tepalis tribus exterioribus discoloribus, intus luteis, extus aurantiacis, ramis inflorescentiae valde elongatis et fructo magno oblongo insignis. *A. brevicauli* (Bertol.) J. Gay ex Baker peraffinis sed fructibus majoribus oblongis, inflorescentiis ramosioribus, et foliis latioribus valde nervatis differt.

Planta perennis (20-) 50-70 (-90)cm alta. Radices cylindricae, crassae, carnosae, (2-) 2.5-3 (-3.5)mm latae, valde elongatae. Caulis strictus vel ascendens, crassus, 3/5-4/5 inferiore, rarius tota longitudine foliatus. Folia linearis-subtriangularis, nervosa, (20-) 25-35 (-40)cm × (2-) 4-6 (-8)mm, apice longe attenuata, margine scabrida, in vaginam basalem magnam caulem amplectentem dilatata. Racemus (10-) 20-30 (-40)cm longus, Plerumque 3-6-ramosus, ramis valde elongatis, laxifloris. Bracteae scarosas, basi deltoideae vel lanceolatae, 5-10 (-15)mm longae, ad apicem longe acuminatae vel cuspidatae. Pedicelli floriferi (5-) 7-8mm longi, in fructu erecto-patentes, (7-) 9-12 (-16)mm longi, infra vel ± ad medium articulati. Perigonium luteum, (18-) 20-22 (-23)mm longum, fusco-viridi vittatum; tepala exteriora linearia, 3-5mm lata, discoloria, intus lutea extus aurantiaca, tepala interiora ± elliptica 5-8 (-10)mm lata, concoloria. Stamina inaequilonga. Capsula ± oblonga, 12-16 (-17) × (11-) 12-13 (-15)mm. Semina acute trigona, (3.5-) 4-5mm longa, (3-) 3.5-4mm lata et 3-4mm alta. Fl. 5-6. Shrubby, stony places, 650-1400m. 2n = 28.

Type: Turkey C5/6 Hatay, SE of Keldagi (Akra dagi), 1400m, rocky places, 27 v 1977, *E. Tuzlaci* ISTE 37201 (holo. ISTE, iso. E).

TURKEY: C4 Içel: 17km Gülnar to Aydincik, 650m, 8 v 1977, *N. Sütlüpınar* ISTE 36695; ibid., 800m, 15 vi 1981, *E. Tuzlaci* ISTE 46514; Gülnar, 6 vi 1950, *A. Atilla* ISTF 10334; nr Gülnar, 1100m, 15 vi 1981, *E. Tuzlaci* ISTE 46522. C5/6 Hatay: Yayladağ, 17 v 1962, *A. & T. Baytop* ISTE 7090; Yayladağ to Kışlalı, 650m, 28 vi 1965, *O. Tosun, K. Karamanoğlu* 1743; S of

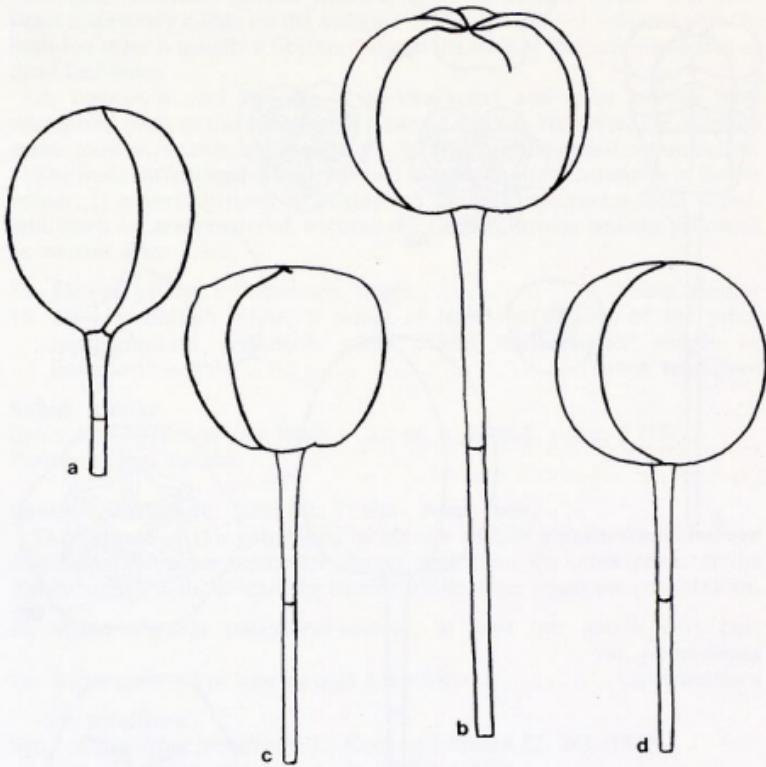


FIG. 2. *Asphodeline* fruits: A, *A. baytopae*; B, *A. peshmeniana*; C, *A. anatolica*; D, *A. cilicica*. All \times approx 1.

Antakya, 11 v 1974, *D. & U. Rückbrodt*. C6 Adana: Osmaniye to Fevzipaşa, Nurdyagi geçidi, 1100m, 29 v 1978, *E. Tuzlaci* ISTE 40039; Gaziantep: Aintab, 18 vi 1865, *Haussknecht*; Aintab, vi 1889, *Post*; 68km from Bahçe to Gaziantep, 850m, 14 v 1977, *N. Sütlüpınar* ISTE 36726; 40km from Gaziantep to Fevzipaşa, 1100m, 29 v 1978, *E. Tuzlaci* ISTE 40039.

SYRIA: Syria Orientalis, *Aucher Eloy* 2164; north of Kessab, Mt Cassius, marshy place, 7 vi 1884, *Post* 338; hills round Kessab, Mt Cassius, 3000-3500ft, 9 v 1945, *F. H. Norris*.

This new species is remarkable on account of its discolored outer tepals (inside yellow, outside orange), inflorescence with 3–6 (–10) branches (rarely less-branched or simple), large oblong fruits, and broad strongly nerved leaves.

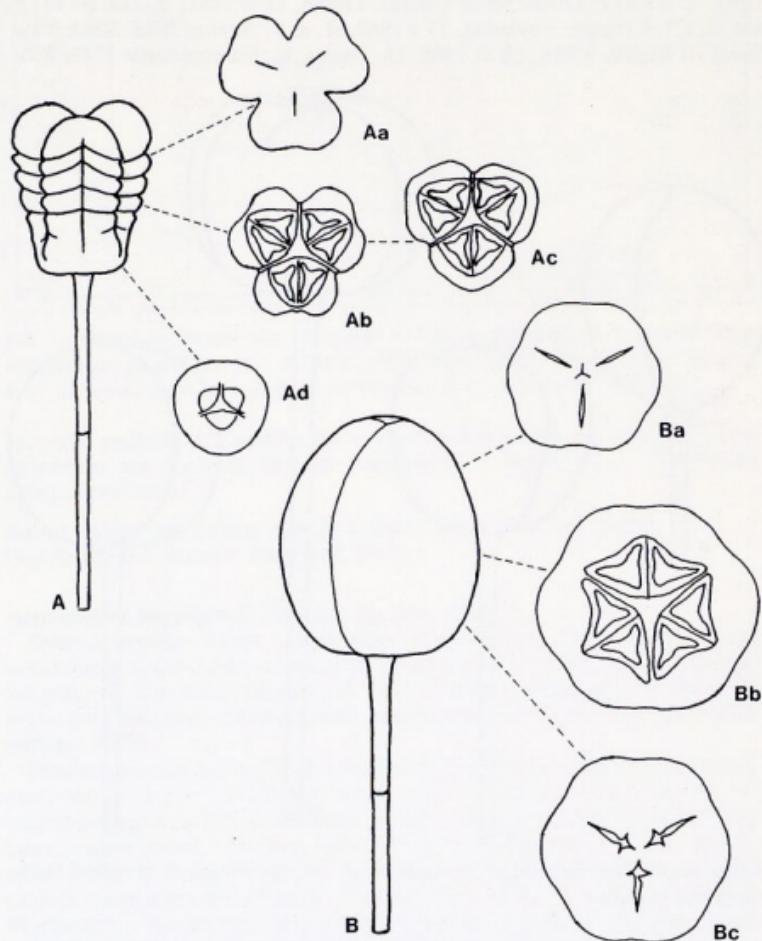


FIG. 3. *Asphodeline* fruits showing transverse sections at different levels: A, *A. damascena* subsp. *rugosa*; B, *A. damascena* subsp. *ovoidea*. All \times approx. 1.

It is very close to *A. brevicaulis* (Bertol.) J. Gay ex Baker, but differs in its larger, oblong fruits, more branched inflorescence, and usually wider and more strongly nerved leaves. In general appearance it resembles *A. brevicaulis* subsp. *druzorum* in its tall habit and very leafy stems.

This species has been named after Professor Dr. A. Baytop (Faculty of Pharmacy, University of Istanbul, Turkey), who was one of its first collectors.

Asphodeline tenuior (Fisch.) Ledeb., Fl. Ross. 4: 193 (1853).

A. tenuior is distinguished from its closest allies *A. liburnica* (Scop.) Reichb. and *A. brevicaulis* mainly by having a distinctly longer rhizome, very thin, crowded fibrous roots, \pm striate to sulcate stems, and leaf-bases \pm minutely ciliate on the margins of the membranous-dilated part. In addition there is usually a fibrous collar at the base of the stem composed of dead leaf-bases.

A. tenuior is very variable in all characters and some authors have recognised parts of the variation as separate species. However, the diversity seems most accurately represented by the infraspecific classification below.

The main difference between the two subspecies of *A. tenuior* is in flower colour. It is very difficult to distinguish the type subspecies from subsp. *tenuiflora* on dried material, because the pinkish flowers become yellowish or whitish when dried.

1a. Flowers yellow; inflorescence simple subsp. ***tenuior***
 1b. Flowers pinkish white, if white at least the outside of the outer tepals \pm pinkish (yellowish when dried); inflorescence simple or branched subsp. ***tenuiflora***

Subsp. *tenuior*

Syn.: *Asphodelus tenuior* Fisch., Cat. pl. h. gorenk. p.a.p. 9 (1812).

Distribution: Caucasia.

Subsp. *tenuiflora* (C. Koch) E. Tuzlaci, comb. nov.

The flowers of this subspecies in life are usually pinkish white and the outside of the outer tepals are darker pink than the other parts. If the flowers are whitish, at least the outside of the other tepals are pale pinkish.

1a. Stems \pm densely puberulent-scabrid, at least just above leafy part var. ***puberulenta***
 1b. Stems glabrous or bearing only a few hairs var. ***tenuiflora***

Var. *tenuiflora*

Syn.: *Asphodelus tenuiflorus* C. Koch in Linnaea 22: 261 (1849).

A. szovitsii C. Koch, loc. cit. 22:261 (1849).

A. persicus Fisch. in pl. Szov.

Asphodeline rigidifolia (Boiss.) Baker var. *foliosa* Freyn & Sint. in Öst. Bot. Zeitschr. 42: 379 (1892).

A. tenuiflora (C. Koch) Misch., in Fl. Cauc.-Crit. 2: 122 (1912).

Distribution: Caucasia, Iran, Turkey.

Var. *puberulenta* E. Tuzlaci, var. nov.

A var. *tenuiflora* caulinis \pm puberulenti-scabridis differt.

Type: Turkey B7 Sivas: Divriği, Dumluca dağı, 30 v 1968, T. Baytop ISTE 12901 (holo. ISTE; iso. E, K).

TURKEY: B6 Sivas: above Gürün, 1220 m, 18 vi 1954, P. H. Davis 21986; 42 km N of Gürün, 1700m, 1 vii 1970, Sorger 70-33-76; Ulaş, nr Tecer

köyü, Tecer dağı, 1550m, 21 vii 1978, E. Tuzlaci ISTE 41010; 24km from Gürün to Pınarbaşı, 1640m, 9 vi 1981, E. Tuzlaci ISTE 46512. B7 Tunceli: Ovacık, nr Köseköyü, 1200m, 5 v 1979, S. Yıldırımli 1370. Erzincan: Eğin (Kemaliye), vi 1953, A. Atilla ISTF 12891.

Distribution: endemic.

This variety is remarkable in having a fairly dense puberulent scabrid indumentum on the stem, at least above the leafy part. The indumentum, which has not previously been recorded in *Asphodeline*, shows great variability in density. However, in some adjacent areas, we have seen in populations of *A. tenuior* subsp. *tenuiflora* var. *tenuiflora* intermediate forms with weakly puberulent-scabrid stems. The new variety usually occurs in dry steppic gypsaceous and clayey places.

Asphodeline damascena (Boiss.) Baker in J. Linn. Soc. 15: 276 (1876).

This species is widespread in the Middle-East and is very variable, especially in Turkey. After investigating numerous specimens four subspecies were distinguished.

- 1a. Stems leafy in the lower $\frac{2}{5}$ — $\frac{7}{10}$; plants very tall (up to 170cm) subsp. **gigantea**
- 1b. Stems less leafy, or all leaves basal; plants usually shorter, 45–100 (–140)cm tall 2
- 2a. Fruits \pm ovoid; loculi in transverse section \pm stellate in outline; seeds larger, 5–5.5 (–6)mm long subsp. **ovoidea**
- 2b. Fruits obovoid, obtigonous, pyriform or oblong to cylindrical; loculi in transverse section \pm triangular to rounded in outline; seeds smaller, 4–4.5 (–5)mm long 3
- 3a. Carpels of fresh fruits obviously transversely 3–4 (–5)-rugose; deep longitudinal sulci present between carpels subsp. **rugosa**
- 3b. Carpels of fresh fruits without, or with only a single, transverse constriction; longitudinal sulci between carpels absent or little developed subsp. **damascena**

Subsp. *damascena*

Syn.: *Asphodelus damascenus* Boiss., Diagn. ser. 1(13): 22 (1854).

Asphodeline balansae [J. Gay ex] Baker in J. Linn. Soc. 15:277 (1876).

A. isthmocarpa [J. Gay ex] Baker, op. cit. 278 (1876).

A. wiedemanniana Czeczk in Acta Soc. Bot. Polon. 9: 44 (1932).

Very widespread in Turkey and found in the vilayets of Adana, Ankara, Artvin, Bingöl, Çankırı, Elazığ, Erzincan, Eskisehir, Gümüşhane, İçel, Kayseri, Kütahya, Malatya, Nevşehir, Niğde, Sivas, Tokat, Yozgat and Zonguldak.

Very variable in many features, e.g. density of inflorescence, flower size, fruit shape, articulation of pedicels, and leaf characters. Comparative study reveals many intermediate forms. In the past some extreme specimens were considered as distinct species, e.g. *A. balansae*, *A. isthmocarpa*, *A. wiedemanniana*; these were based on few gatherings from very restricted areas, and are here reduced to synonymy.

Distribution: Lebanon, Palestine, Syria, Turkey.

Subsp. **rugosa** E. Tuzlaci, subsp. nov. (Fig. 3).

A subsp. *damascena* fructibus rugosis 3-4 (-5) distinctis transversalibusque et profunde 3-sulcatis longitudinalibus differt.

Type: Turkey B5 Kayseri, Yahyalı, Sazak köyü, rocky slopes, 1400m, 1 viii 1979, E. Tuzlaci & M. Saracoğlu ISTE 43447 (holo. ISTE, iso. E).

TURKEY: B5 Kayseri: Yahyalı to Sazak, nr Sazak köyü, 1350m, 19 vi 1977, E. Tuzlaci ISTE 37614; ibid., 1200m, 19 vi 1977, E. Tuzlaci ISTE 37616; ibid., Zamanti valley, stony slopes, 1350m, 1 vi 1978, E. Tuzlaci ISTE 40164; Develi, nr Kisge köyü, 1350m, 31 vii 1979, E. Tuzlaci ISTE 43427; nr Taşçı, 1370m, 31 vii 1979, E. Tuzlaci ISTE 43429; Yahyalı to Sazak, 9 viii 1980, E. Tuzlaci ISTE 45759. B6 Adana: mountains nr Hadjin (Saimbeyli), 7 vii 1906, Post 883. C5 Kayseri: Yahyalı, Şamadan mevkii, E of Aladağ, 1330m, 26 vii 1979, E. Tuzlaci ISTE 43269. Yahyalı, Büyük Çakır köyü, nr Şelale, 660m, 26 vii 1979, E. Tuzlaci ISTE 43271.

Distribution: endemic.

This remarkable subspecies is distinguished, in the fresh state, by its very distinct transversely 3-4 (-5)-rugose and longitudinally deeply 3-sulcate fruits; a transverse section from the upper part of the fruit is distinctly 3-lobed as opposed to rounded or only very slightly 3-lobed in the other subspecies (Fig. 3).

Subsp. **gigantea** E. Tuzlaci, subsp. nov.

A subsp. *damascena* habitu elatiore (90-170cm alta), caule crassiori (10-15mm lata) et in dimidio inferiore foliato differt.

Type: Turkey C6 Gaziantep, 23km from Gaziantep to Narli, 850m, 23 vi 1977, E. Tuzlaci & A. Baytop ISTE 37819 (holo. ISTE, iso. E).

TURKEY: C6 Gaziantep: Aintab, 610m, 25 v 1865, Haussknecht; Aintab, vi 1889, Post; 23km W of Gaziantep, 24 vi 1977, E. Tuzlaci ISTE 37835; ibid. 950m, 30 v 1978; E. Tuzlaci ISTE 40085; ibid., 30 v 1978, E. Tuzlaci ISTE 40090. C7 Adiyaman: Nimrud d. (Nemrut dağı), 20 v 1888, Sintenis 801; Urfa, 10km from Hilvan to Urfa, fallow fields, 18 v 1959, Davis 28244; 15km from Hilvan to Urfa, 750m, 15 vi 1979, E. Tuzlaci ISTE 42262. C8 Diyarbakır: 39km from Diyarbakır to Mardin, 700m, 9 vi 1979, E. Tuzlaci ISTE 42145; Mardin, 60km from Diyarbakır to Mardin, in *Quercus* comm., 980m, 9 vi 1979, E. Tuzlaci ISTE 42135; Above (S of) Gercüş, 1100m, steppe, 13 vi 1966, Davis 42874; 2km from Gercüş to Midyat, 1050m, 8 vi 1979, E. Tuzlaci ISTE 42104.

Distribution: endemic.

Recognised by its very tall habit and thick stem which is leafy in the lower half; these characters distinguish it from the other three subspecies of *A. damascena*.

Subsp. **ovoidea** E. Tuzlaci, subsp. nov. (Fig. 2).

A subsp. *damascena* fructu ± ovoideo, 11-12 (-13)mm longo, 10-11mm lato, seminibus majoribus, 5-5.5 (-6)mm longis, (4-) 4.5 (-5)mm latis, 4mm altis differt.

Type: Turkey C6 Maraş, Ahirdağ, 850m, 23 vi 1977, E. Tuzlaci & A. Baytop ISTE 37817 (holo. ISTE).

TURKEY: C6 Maraş: Ahirdağ, 1300m, 23 vi 1977, E. Tuzlaci ISTE 37818; ibid., 950m, 31 v 1978, E. Tuzlaci ISTE 40128; 48km from Göksun to

Maraş, nr Suçatı, in *Pinus comm.*, 650m, 31 v 1978, *E. Tuzlaci* ISTE 40132; *ibid.*, 19 vi 1979, *E. Tuzlaci* ISTE 42345 a.

Distribution: endemic.

This new subspecies is distinguished by its ovoid fruits (rarely slightly narrowed at base). In the other three subspecies, the fruit is \pm cylindrical to pyriform or \pm obtrigonous. Seeds of subsp. *ovoidea* are usually bigger than those of the other three subspecies in which they are (3.5-) 4-4.5 (-5)mm long, 3-3.5 (-4)mm wide and 3 (-3.5)mm tall. In addition, the loculi of the fruit in transverse section are \pm stellate in outline, not rounded or \pm triangular as in subsp. *damascena*, *gigantea* and *rugosa* (Fig. 3).

Asphodeline peshmeniana E. Tuzlaci, sp. nov. (Fig. 2).

Species fructu maximo, depresso globoso, pedicellis longissimis insignis.

Planta biennis, (55-) 60-75 (-85)cm alta. Radices densae graciles durae. Caulis teres, strictus, (8-) 10-12mm crassus. Folia omnia radicalia, rosulata, anguste linearis-subtriquetra, apice subulato-attenuata, margine scabrida, basi membranaceo-dilatata. Racemus simplex, (30-) 35-50 (-55)cm longus, densiusculus. Bracteae scariosae, lanceolatae, apicibus cuspidato-acuminatae. Pedicelli fasciculati, in fructu (25-) 30-35 (-40)mm longi ad \pm medium articulati. Perigonium album, 18-20 (-22)mm longum. Stamina valde inaequilonga. Capsula subglobosa, 11-12 (-13) \times 15-17 (-18)mm, ad apicem et basem depressa, \pm retusa. Semina acute trigona, 5mm longa, 4mm lata, 3.5-4mm alta. Fl. 5-6. Dry, open places, 1400-1450m.

Type: Turkey B6 Maraş: N foot of Berit dağı, between Karadut and Ericek villages, 1430m, dry and open places, 20 vi 1979, *E. Tuzlaci & M. Saracoğlu* ISTE 42363 (holo. ISTE, iso. E).

Distribution: endemic.

This remarkable endemic species is distinct in having very large, depressed globose fruits and very long pedicels. It has the largest fruits of any *Asphodeline* species.

It has been named in memory of the Turkish botanist Doç. Dr. H. Peşmen (University of Hacettepe, Ankara) who died in December 1980.

Asphodeline anatolica E. Tuzlaci, sp. nov. (Fig. 2).

Affinis *A. damascenae* (Boiss.) Baker subsp. *giganteae* E. Tuzlaci sed fructu majore, \pm globoso, planta saepe altiore differt.

Planta biennis, saepe altissima, (115-) 140-160 (-185)cm alta. Radices densae graciles durae. Caulis teres, (10-) 15-18 (-20)mm crassus, in dimidio inferiore dense foliatus. Folia linearis-subulata, subtriquetra, margine scabrida, basi late membranaceo-marginata. Racemus saepe simplex, (30-) 50-70 (-100) cm longus, laxus. Bracteae scariosae, lanceolatae longe acuminatae. Pedicelli fasciculati, in fructu 20-25 (-30)mm longi, infra medium articulati. Perigonium album, 20-23mm longum. Stamina valde inaequilonga. Capsula subglobosa 12 (-13) \times 13 (-14)mm, ad apicem depressa. Semina (4-) 5mm longa, 3mm lata et 3mm alta, dorso \pm prominenter uni-sulcata. Fl. 5-6. Open, rocky and stony places, 1100-1300m.

Type: Turkey C3 Antalya, 28km from Korkuteli to Elmalı, 1120m, 23 vi 1980, *E. Tuzlaci, N. & E. Özhatay* ISTE 45009 (holo. ISTE, iso. E).

TURKEY: B3/C3 Isparta: 11km from Şarkikaraağaç to Yenişarbademli, rocky hillside, 1100m, 26 vi 1980, *E. Tuzlaci* ISTE 45117. C2 Mugla: 18 vi 1976, *Y. Akman* 6037. C3 Antalya: Boğaz azzi (Boğaz ağzı) on Bozburun d., open *Pinus nigra* forest, 23 vii 1959, *Davis* 15498; Isparta, Anamas Da., Kurutepe, steppenhügel, 1300m, 16 vi 1967, *Sorger* 67-4-53.

Distribution: endemic.

This new SW Anatolian endemic is recognised by its very tall habit and stems very leafy in the lower half. In general appearance it is only close to *A. damascena* subsp. *gigantea* which is found in SE Anatolia and Mesopotamia (Gaziantep, Urfa, Adiyaman, Diyarbakir, Mardin). *A. anatolica* differs from the latter in its fruits and usually taller, more robust habit. It also differs in the pedicels usually being articulated below the middle; in *A. damascena* subsp. *gigantea* the articulation is about the middle.

A. anatolica is the tallest known member of the genus.

Asphodeline cilicica E. Tuzlaci, sp. nov. (Fig. 2).

Affinis *A. anatolicae* E. Tuzlaci et *A. peshmeniana* E. Tuzlaci, sed a priori fructu globoso, non depresso, habitu humiliore, caulis minus foliatis recedit; a secundo fructu globoso, non depresso, habitu elatiore, racemo laxiore interdum ramoso differt.

Planta biennis, (90-) 100-120 (-130) cm alta. Radices densae graciles durae. Caulis teres, strictus, basi tantum foliatus. Folia linearis-subulata, subtriquetra, margine scabrida, apice subulato-attenuata, basi membranaceo-dilatata. Racemus simplex vel ramosus, 45-80cm longus, laxus. Bracteae scariosae, lanceolatae, longe acuminatae. Pedicelli fasciculati, in fructu (15-) 20-25mm longi, ad ± medium vel infra aut supra articulati. Perigonium album, 20-22mm longum. Stamina valde inaequilonga. Capsula globosa, 13-14 (-15)mm longa. Semina acute trigona, 5mm longa, 3.5-4mm lata et 3.5 (-4)mm alta. Fl. 6-7. Open *Pinus* forest, 1100-1600m. Type: Turkey C5 Adana, 15km from Karsanti to Çatalan, Karaküre mevkii, open *Pinus* forest, 1100m, 25 vii 1979, *E. Tuzlaci & M. Saracoğlu* ISTE 43256 (holo. ISTE, iso. E).

TURKEY: C5 Adana: Karsanti, Yapraklı distr., Elmaseki mevkii, slopes, 1360m, 26 vii 1979, *E. Tuzlaci* ISTE 43264; ibid., Ardiçlidölek mevkii, 1580m, 26 vii 1979, *E. Tuzlaci* ISTE 43300; Karsanti, Trak distr., E of Kaldi dagi, slopes, 1420m, 27 vii 1979, *E. Tuzlaci* ISTE 43320.

Distribution: endemic.

Close to *A. peshmeniana* and *A. anatolica*. It differs from *A. peshmeniana* in its smaller, not depressed globose fruits, taller habit and the laxer, sometimes branched inflorescence. It differs from *A. anatolica* in its shorter habit, less leafy stems and globose fruits which are not depressed. It is also distinguished from *A. damascena* subsp. *ovoidea* mainly by its distinctly different fruit shape. Some specimens I have seen in Ahırdağı (Maraş) are intermediate between *A. peshmeniana* and *A. cilicica*.

ACKNOWLEDGEMENTS

I am grateful to the directors and curators of the following herbaria for the loan of material and providing facilities to study specimens: AEF, ANK, ATA, BM, DUF, E, EGE, HUB, K, ISTF, ISTO.

I am indebted to Miss V. A. Matthews for suggestions and criticism, and to Dr R. Mill for correcting the Latin descriptions and helping with the English translation. I wish to thank Doç Dr N. Özhatay for counting the chromosomes of *Asphodeline baytopae*.

I am also grateful for the scholarship given by the Scientific and Technical Research Council of Turkey (TÜBITAK) to study for two months in the Royal Botanic Garden, Edinburgh.